

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A CCD pulse generator comprising:

a digital delay type CCD control signal generating section means for finely delaying a transfer signal for driving a CCD, thereby generating a plurality of delay signals, and changing selection of the plurality of delay signals, thereby generating a CCD control signal corresponding to set rise and fall timings;

an inverted/non-inverted signal generating section means for generating an inverted signal and a non-inverted signal of the CCD control signal;

a selection section means for selecting the inverted signal and the non-inverted signal of the CCD control signal;

an output section means, having an output enable function, for outputting the signal selected by said selection section means; and

an output signal condition setting section means for setting pieces of condition setting information that determine operations of said respective sections, said output signal condition setting section being formed by a register which is controlled by data, clock, and load control signals.

2. (Currently Amended) [[A]] The generator according to claim 1, wherein the CCD pulse generator further comprises a blanking section means for temporarily

disabling a CCD reset signal, ~~[[and]]~~ wherein the CCD control signal includes the CCD reset signal.

3. (Currently Amended) ~~[[A]]~~ The generator according to claim 1, wherein the CCD pulse generator further comprises a blanking section ~~means~~ for temporarily disabling a CCD clamp signal, ~~[[and]]~~ wherein the CCD control signal includes the CCD clamp signal.

4. (Currently Amended) ~~[[A]]~~ The generator according to claim 1, wherein the CCD pulse generator further comprises a blanking section ~~means~~ for temporarily disabling a CCD spare signal, ~~[[and]]~~ wherein the CCD control signal includes the CCD spare signal.

5. (Currently Amended) ~~[[A]]~~ The generator according to claim 1, wherein the CCD control signal includes a CCD spare signal.

6. (Currently Amended) ~~[[A]]~~ The generator according to claim 5, further comprising a blanking section ~~means~~ for temporarily disabling the CCD spare signal.

7. (Currently Amended) A CCD pulse generator comprising:
a digital delay type sampling signal generating section ~~means~~ for finely delaying a transfer signal for driving a CCD, thereby generating a plurality of delay signals, and

changing selection of the plurality of delay signals, thereby generating a sampling signal for sampling a CCD output in synchronism with set rise and fall timings;

an inverted/non-inverted signal generating section ~~means~~ for generating an inverted signal and a non-inverted signal of the CCD control signal;

a selection section ~~means~~ for selecting the inverted signal and the non-inverted signal of the CCD control signal;

an output section ~~means~~, having an output enable function, for outputting the signal selected by said selection section ~~means~~; and

an output signal condition setting section ~~means~~ for setting pieces of condition setting information that determine operations of said respective sections, said output signal condition setting section being formed by a register which is controlled by data, clock, and load control signals.

8. (Canceled)

9. (Currently Amended) ~~[[A]]~~ The generator according to claim 1 ~~[[8]]~~, wherein said output signal condition setting section ~~means is formed by a register which is controlled by three data, clock, and load control signals, and can be cascade—~~ connected to another functional element section ~~means~~ formed by a register which is controlled by data, clock, and load control signals.

10. (Currently Amended) ~~[[A]]~~ The generator according to claim 1 ~~[[8]]~~, wherein the register is controlled via a terminal for selecting an element operation order.

11. (Currently Amended) ~~[[A]]~~ The generator according to claim 1 ~~[[8]]~~, wherein the register is controlled via a terminal for element enable selection.

12. (Currently Amended) ~~[[A]]~~ The generator according to claim 1 ~~[[8]]~~, wherein the register is controlled via communication by a setting section means including a CPU.

13. (Currently Amended) ~~[[A]]~~ The generator according to claim 1 ~~[[8]]~~, wherein said respective sections means are arranged in one chip of an integrated circuit.

14. (Currently Amended) ~~[[A]]~~ The pulse generator unit which is formed by combining at least two of pulse generators defined in claims 2 to 6 and comprises a plurality of output sections means, wherein all output enable functions of said output sections means are simultaneously controlled by one setting.

15. (Currently Amended) ~~[[A]]~~ The generator according to claim 1, wherein the transfer signal is received by a differential input section means to generate the plurality of delay signals.

16. (Currently Amended) ~~[[A]]~~ The generator according to claim 2, wherein said respective sections means are arranged in one chip of an integrated circuit,

said blanking section means comprises an internal blanking signal generating section means for generating a blanking signal within the integrated circuit, an external blanking signal input section means for receiving a blanking signal outside the integrated circuit, and a blanking signal selection section means for selecting the internal blanking signal and the external blanking signal, and

selection of said blanking signal selection section means is set by said output signal condition setting section means.

17. (Currently Amended) [[A]] The generator according to claim 1, wherein a signal for driving a line CCD is generated.

18. (Currently Amended) An image forming apparatus comprising:

a CCD;

a digital delay type CCD control signal generating section means for finely delaying a transfer signal for driving said CCD, thereby generating a plurality of delay signals, and changing selection of the plurality of delay signals, thereby generating a CCD control signal corresponding to set rise and fall timings;

an inverted/non-inverted signal generating section means for generating an inverted signal and a non-inverted signal of the CCD control signal;

a selection section means for selecting the inverted signal and the non-inverted signal of the CCD control signal;

an output section means, having an output enable function, for outputting the signal selected by said selection section means; and

an output signal condition setting section ~~means~~ for setting pieces of condition setting information that determine operations of said respective ~~means~~ sections, said output signal condition setting section being formed by a register which is controlled by three, data, clock, and load control signals.

19. (Currently Amended) ~~[[A]]~~ The apparatus according to claim 18, wherein the image forming apparatus further comprises a blanking section ~~means~~ for temporarily disabling a CCD reset signal, and the CCD control signal includes the CCD reset signal.

20. (Currently Amended) ~~[[A]]~~ The apparatus according to claim 18, wherein the image forming apparatus further comprises a blanking section ~~means~~ for temporarily disabling a CCD clamp signal, and the CCD control signal includes the CCD clamp signal.

21. (Currently Amended) ~~[[A]]~~ The apparatus according to claim 18, wherein the image forming apparatus further comprises a blanking section ~~means~~ for temporarily disabling a CCD spare signal, and the CCD control signal includes the CCD spare signal.

22. (Currently Amended) ~~[[A]]~~ The apparatus according to claim 18, wherein the CCD control signal includes a CCD spare signal.

23. (Currently Amended) [[A]] The apparatus according to claim 22, further comprising a blanking section ~~means~~ for temporarily disabling the CCD spare signal.